



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

A DRIVE A TROVING	FU DIO DATE	FIRST MANUEL BUILDINGS	ATTORNITY DOCUMENTO	CONTRACTOR
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,649	03/01/2002	Ronald Lynn Blair	PU020030	6963
7590 09/12/2007 JOSEPH S. TRIPOLI THOMSON MULTIMEDIA LICENSING INC. 2 INDEPENDENCE WAY			EXAMINER	
			JONES, HEATHER RAE	
P. O. BOX 5312		ART UNIT	PAPER NUMBER	
PRINCETON,	PRINCETON, NJ 08543-5312			
	•			·
			MAIL DATE	DELIVERY MODE
			09/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

MAILED

SEP 1 2 2007

Technology Center 2600

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/086,649

Filing Date: March 01, 2002 Appellant(s): BLAIR ET AL.

> Jorge Tony Villabon Reg. No. 52,322 For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed July 27, 2007 appealing from the Office action mailed December 1, 2006

Application/Control Number: 10/086,649

Art Unit: 2621

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,925,340	Suito et al.	8-2005
6,658,197	Shimura	12-2003

Art Unit: 2621

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, 6, 11-14, 18, 23, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Suito et al. (U.S. Patent 6,925,340).

Regarding claim 1, Suito et al. discloses a method for playing an audio track during video trick mode playback of a video presentation, the method comprising: reading a coded digital data from a storage medium, the coded digital data comprising a video programming and corresponding audio programming; decoding a plurality of digital audio samples corresponding to a selected portion of the video presentation from a portion of the read digital data; repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed at the video presentation (abstract); transforming the digital audio samples from time domain to corresponding frequency domain audio samples; and scaling a playback audio frequency of the frequency domain audio samples in accordance with the trick mode playback (col. 7, line 59 – col. 8, line 8).

Regarding claim 2, Suito discloses all the limitations as previously discussed with respect to claim 1 as well as disclosing the method further comprises generating an audio playback signal corresponding only to a remaining set of the audio samples (abstract).

Regarding claim **6**, Suito discloses all the limitations as previously discussed with respect to claim 1 including that the scaling step further

Art Unit: 2621

comprises transforming said scaled frequency domain audio samples to corresponding time domain digital audio samples (col. 7, line 59 – col. 8, line 8).

Regarding claim **11**, Suito discloses all the limitations as previously discussed with respect to claim 1 including that the storage medium is selected from a group consisting of a DVD, a magnetic hard disk, magneto optical disk, a video CD, and a solid state memory device (as can be seen from Fig. 1).

Regarding claim **12**, Suito discloses all the limitations as previously discussed with respect to claim 1 including that the coded digital data is an MPEG format and the reading step further comprises decoding an MPEG bit stream to obtain said audio samples (col. 5, lines 53-60).

Regarding claims **13**, **14**, **18**, **23**, and **24**, these are apparatus claims corresponding to the method claims 1, 2, 6, 11, and 12. Therefore, claims 13, 14, 18, 23, and 24 are analyzed and rejected as previously discussed with respect to claims 1, 2, 6, 11, and 12.

Claims 7-10 and 19-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Suito as applied to claims 1 and 13 above, and further in view of Shimura (U.S. Patent 6,658,197).

Regarding claims 7, Suito discloses all the limitations as previously discussed with respect to claim 1, but fails to further disclose the method comprising repeating selected ones of the audio samples at a rate inversely proportional to a selected trick mode video playback speed of said video

programming to produce a trick mode set of audio samples, and generating an audio playback signal corresponding to said trick mode set of the audio samples.

Referring to the Shimura reference, Shimura discloses a method comprising repeating selected ones of the audio samples at a rate inversely proportional to a selected trick mode video playback speed of said video programming to produce a trick mode set of audio samples, and generating an audio playback signal corresponding to said trick mode set of the audio samples (Fig. 4; col. 5, lines 33-50; col. 6, lines 29-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the feature of having better quality sound at a lower speed as disclosed by Shimura to the device disclosed by Suito in order to provide a user with a device that provides a quality sound at a higher or lower speed (during trick play).

Regarding claim **8**, Suito in view of Shimura discloses all the limitations as previously discussed with respect to claims 1 and 7 including that the audio samples are repeated 1/n times, where n is equal to the selected trick mode playback speed relative to a normal playback speed (Shimura: Fig. 4).

Regarding claims **9** and **10**, Suito in view of Shimura discloses all the limitations as previously discussed with respect to claims 1, 7, and 8 including that the scaling step further comprises scaling the amplitude of the frequency domain audio samples by factor of approximately 1/n as well as scaling an amplitude of the frequency domain audio samples by factor of approximately n

Application/Control Number: 10/086,649 Page 6

Art Unit: 2621

(Shimura: Fig. 4; col. 7, lines 29-32; Suito: col. 7, line 31 – col. 8, line 8 – the frequency and the amplitude go hand in hand).

Regarding claims **19-22**, these are apparatus claims corresponding to the method claims 7-10. Therefore, claims 19-22 are analyzed and rejected as previously discussed with respect to claims 7-10.

(10) Response to Argument

The Appellant argues on page 21, lines 11-18 that Suito et al. fails to disclose "repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed of the video presentation" because Suito et al. discloses that for each processing unit period, sound absence portion(s) of the reproduced sound signal are deleted or partially deleted within a range corresponding to a normal speed reproduction. The Examiner respectfully agrees that Suito et al. discloses that for each processing unit period, sound absence portion(s) of the reproduced sound signal are deleted or partially deleted within a range corresponding to a normal speed reproduction. However, the Examiner respectfully disagrees that Suito et al. fails to disclose "repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed of the video presentation". Suito et al. discloses in col. 1, line 58 - col. 2, line 18 and in the abstract deleting a sound absence portion or portions of the reproduction input sound signal in order to reduce the sound data to reproduce the sound signal in shorter time than a normal reproducing time. Furthermore, sound absence

Art Unit: 2621

portions are part of the audio sample as a whole, for example, a pause in between two people speaking. Suito et al. also discloses in col. 2, lines 7-10 partly deleting a sound presence or portions of an amount that cannot be stored into the output buffer for reproduction, which means that sounds may be deleted as well if only deleting the sound absences is not enough to accommodate for the high reproduction speed. Therefore, deleting is the same as dropping selected ones of the digital audio samples and Suito et al. meets the claim limitations. Moreover, the claim does not require the apparatus to be able to repeat and drop selected ones of the digital audio samples.

Page 7

The Appellant argues on page 22, lines 4-7 that Suito et al. fails to disclose "transforming the digital audio samples from time domain to corresponding frequency domain audio samples." The Examiner respectfully disagrees. Suito discloses in col. 5, lines 53-60 that the video data and sound data is compressed in accordance with a compression coding method and a multiplexing method of the MPEG-2 standard. MPEG-2 inherently transforms the digital audio samples from time domain to corresponding frequency domain audio samples in order to process the samples. Therefore, Suito et al. meets the claim limitations.

The Appellant argues on page 23, lines10-13 that Suito et al. fails to disclose "scaling a playback audio frequency of the frequency domain audio samples in accordance with the trick mode playback". The Examiner respectfully disagrees. Suito et al. discloses in Figs. 3-6 that the samples go through an

Application/Control Number: 10/086,649

Art Unit: 2621

amplitude suppression process, which means the amplitudes of the samples are scaled accordingly. Suito et al. also discloses in col. 7, lines 59-64 a frequency characteristic correction filter (77) that performs a required frequency characteristic correction process. Furthermore, Suito et al. discloses that the video data and sound data is compressed in accordance with a compression coding method and a multiplexing method of the MPEG-2 standard, which means the samples are transformed from the time domain to the corresponding frequency domain in order to process the samples. Therefore, Suito et al. meets the claim limitations.

Page 8

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Den Promos Respectfully submitted,

Heather R Jones

Examiner

Art Unit 2321

HRJ

September 4, 2007

Conferees:

Page 9

John Miller, SPE

Thai Tran, SPE

JOHN MILLER

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600